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WEAPONS SYSTEMS EVALUATION GROUP (DEFENSE) ARLINGTON VA  
REVISION OF FALLOUT PARAMETERS FOR LOW-YIELD DETONATIONS. (U)  
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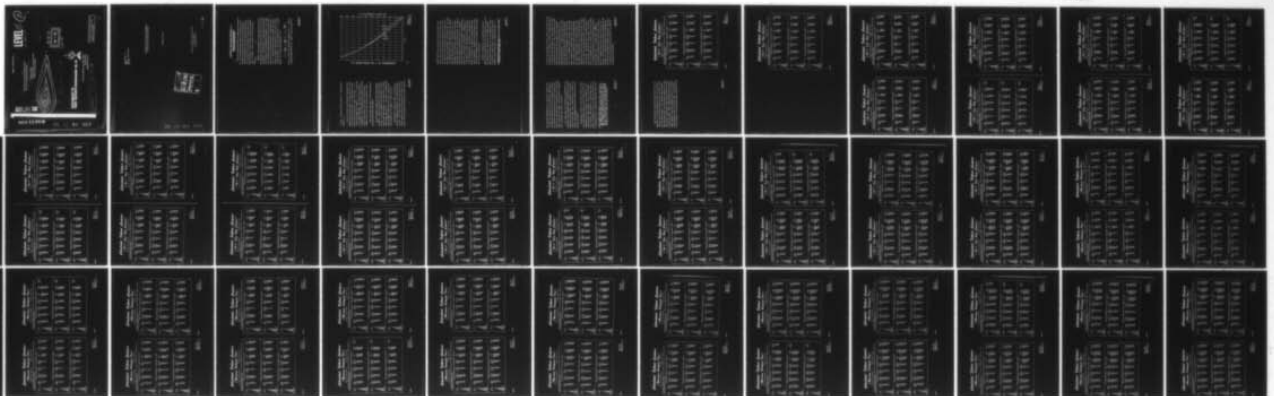
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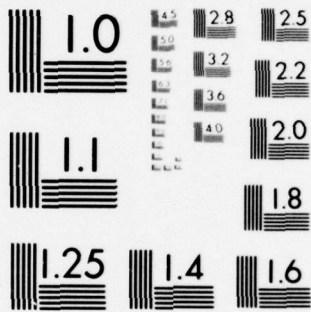
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REVISION OF FALLOUT PARAMETERS  
FOR LOW-YIELD DETONATIONS

George E/Pugh  
Weapons Systems Evaluation Division  
Institute For Defense Analyses



**SUPPLEMENT TO  
WSEG RESEARCH MEMORANDUM NO.10**

WEAPONS SYSTEMS EVALUATION GROUP  
THE PENTAGON  
WASHINGTON 25, D. C.

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Supplement to  
WSEG  
Research Memorandum  
No. 10

REVISION OF FALLOUT PARAMETERS  
FOR LOW-YIELD DETONATIONS

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The Pentagon  
Washington 25, D. C.

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SUPPLEMENT TO WSEG RESEARCH MEMORANDUM NO. 10

REVISION OF FALLOUT PARAMETERS  
FOR LOW-YIELD DETONATIONS

Since the original publication of WSEG Research Memorandum No. 10 we have become aware of additional information on the transport of radioactive debris from low-yield detonations. These data indicate that one cannot assume the same distribution of activity versus particle size for both high- and low-yield detonations. We are, therefore, issuing this supplement which is intended to correct the data for the kiloton-yield range. *K*

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Analysis of this additional low-yield deposition data indicates that the debris is carried only about half as far as would be expected if the distribution of activity versus particle size were the same as for the megaton-yield detonations. Since there is no information available indicating how the low-yield results should join with the high-yield results, a simple modification of the T function has been arbitrarily selected which accomplishes this change and feeds smoothly into the previous results at about one megaton. The revised expression for T to replace equation (37) in Research Memorandum No. 10 is:

$$T = \left[ 12 \left( \frac{h_0}{50} \right) - 2.5 \left( \frac{h_0}{50} \right)^2 \right] \left[ 1 - \frac{1}{2} e^{-\left( \frac{h_0}{25} \right)^2} \right]$$

(This, of course, also changes the expression for T on page 51 of Research Memorandum No. 10.) Figure 1 shows the new plot of

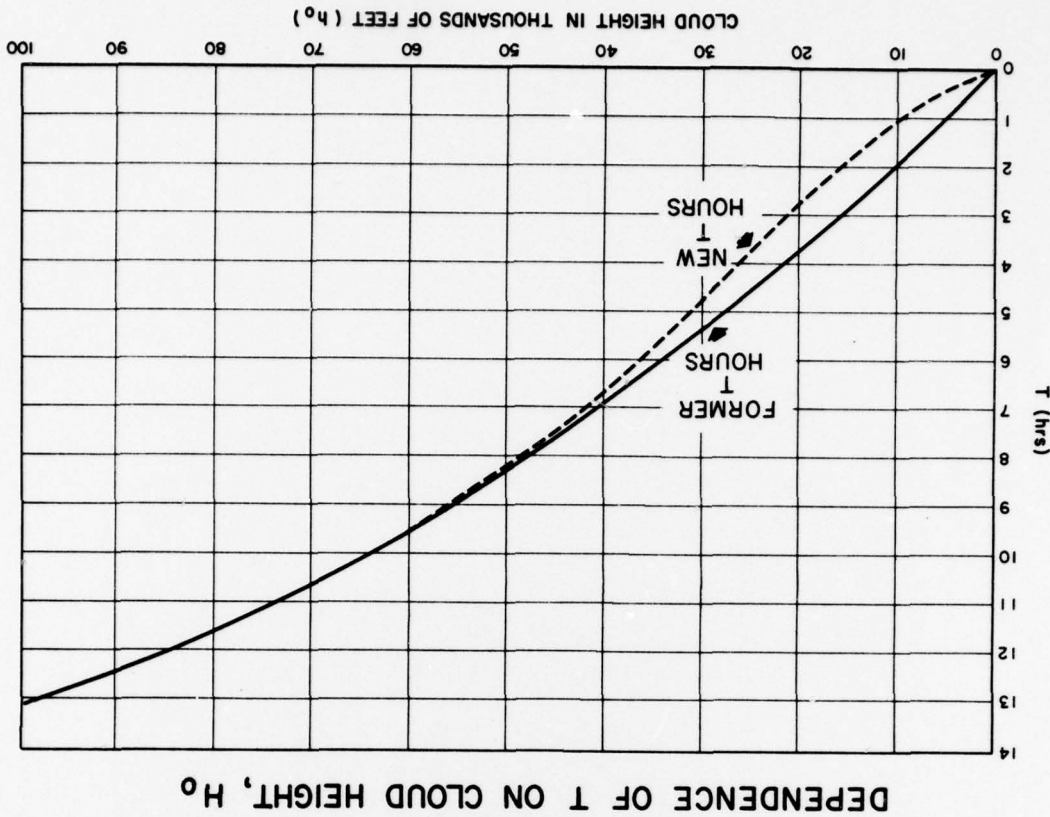
T versus h which then replaces Figure 12 of Research Memorandum No. 10.)

A new set of tables is included which incorporate these changes and give the new results. The new tables can be read exactly as the previous tables. One change should be noted. The new tables are plotted for values of the shear: .2, .4, .8 knots per thousand feet instead of: .1, .2, .4 as was done in the original memorandum. This change was made because a re-examination of the meteorological data indicates that these values are more typical of the effective fallout winds in temperate zones for the lower altitude radioactive clouds.

Since the original publication, two other questions have been raised which merit some comment:

The first question concerns the total radiation assumed per megaton. Additional calculations have now been carried out by C. F. Miller at USNRDL on the fractionation of fission products other than rare gases. His results seem to indicate that the DASA value used for k (the number of roentgen square miles per megaton fission) may be too high. However, additional research will be required to clarify this point.

The second point concerns the extent of upwind fallout, which was inadequately qualified in the original memorandum. It is pointed out that it takes a finite time before extensive fallout begins to arrive on the ground and, therefore, in the case of very strong winds the cloud might be carried completely



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FIGURE 1  
SUPPLEMENT TO  
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downwind before debris covering a large area arrived on the ground. The model used here does not allow for such a delay and, therefore, always produces an upwind extent which, while less than most older models under conditions of large wind is, nevertheless, quite significant in some applications. The available experimental data on upwind deposition have been examined again with this problem in mind. Unfortunately little or no experimental data is available on upwind fallout from ground bursts under conditions of large effective winds. The existing ground burst deposition patterns show little or no downwind drift of the measured upwind extent despite considerable direct evidence for a time delay in the deposition. Consequently, it is not possible to resolve the question by direct examination of this experimental data. Any attempt at a resolution must depend on a combination of analysis of existing data and theoretical extrapolation. Because the fallout processes at early time are poorly understood there are inherently large uncertainties in such an extrapolation.

A specific investigation of the upwind fallout data for megaton yields, using both water and land surface burst data, has been made by Gilbert J. Ferber of the U.S. Weather Bureau. <sup>1/</sup> Ferber proposes an empirical rule for the estimation of upwind fallout which is based on about a 20-minute delay between the detonation and the first arrival of significant fallout. He

1/ Upwind Fallout from Nuclear Detonations in the Megaton Range  
by Gilbert J. Ferber, April 1960.

also tabulates experimental data on upwind and crosswind extent of fallout for comparison with his predictions. Examination of his tabulated data shows that the data are generally consistent with the Ferber predictions and that at least two water surface bursts are not consistent with the tabulations in this memorandum where no time delay is included. It may, therefore, be appropriate to incorporate such a delay in the model.

Such a simple delay can be rigorously incorporated into the predictions of this memorandum simply by translating all contours downwind by a distance equal to that traveled by the effective wind in the delay time. When a 20-minute delay is included, the results of this memorandum become quite consistent with the data tabulated by Ferber.

Unfortunately, the data on actual time of arrival of radioactive debris indicate that the time of arrival will vary from considerably less than 20 minutes close to ground zero to considerably more at larger distances. The use of the constant delay, therefore, under conditions of large wind may leave the region in the immediate vicinity of ground zero erroneously free of significant fallout. The existing experimental data on time

2/ The "upwind" extent shown for "zero" wind in the tables is not related to the problem considered here. That extent is quite arbitrary and actually results from using a value for the x component of the shear which is close to .2 knots/1000 feet. Other values for  $s_x$  would give very different results. The case is shown only to indicate qualitatively the behavior of the formula for very low wind speeds.

of arrival and displacement of arrival position with wind velocity at early times is not adequate to provide a reliable prediction of the extent of fallout near ground zero under conditions of medium to large effective fallout wind. Thus, in any application where specific fallout contours near the ground zero are important, neither this model nor any model presently available can be used without qualification. It seems quite likely that correct answers for megaton yields would fall between those obtained with about 20-30 minute displacement and those obtained with none. If it is necessary to make an estimate it may be appropriate to displace the crosswind extent given for ground zero about 20 minutes downwind and connect this crosswind estimate with smoothly tapered contours to a diminished estimate of upwind extent. The upwind extent for low wind velocities should decrease almost linearly with increasing wind velocity, but more slowly for large wind velocities which affect the close in region of early fallout. This general result is obtained by Ferber by using a two-mile minimum for the upwind extent. To give this effect in a reasonable way for a variety of yields one can reduce all the upwind distances given in the tabulation by a factor of the form  $\frac{1}{1 + \gamma W}$ , where  $\gamma$  is roughly equal to  $\frac{1}{800} h_0 / \gamma_0$ . This decreases the upwind extent by about a factor of two at 20 knots for a 5-megaton burst and by a factor of four for a 60-knot wind. While the contours near ground zero estimated in this way appear to be reasonably consistent with the available data for both water and ground burst megaton detonations, they should be treated as rough estimates only and should not be used without appropriate qualifications.



Much the same type of uncertainty near ground zero is also applicable to low-yield detonations, however, it is clear that the delay time for fallout arrival from very low yields is very much less than 20 minutes. If the effective delay as assumed above were proportional to the stabilization height of the radioactive cloud, it would imply a delay for other yields (in hours) of about  $(1/3 h_0/50)$ . There is some indication that the upwind extent obtained in this way is somewhat too small for very small yield detonations, where no toroid is formed. For such yields it may be better to use the tabulated contours without alteration.

# *Calculated Fallout Contours* *("H+1" Dose Rate Contours)*

YIELD (MEGATONS)  WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	38-	2177	48	141	4490	4917	1200
3	34-	1864	44	117	3337	3535	1200
10	29-	1544	39	86	2210	2124	1200
30	24-	1236	33	70	1226	1366	500
100	17-	835	26	47	579	628	500
300	8-	428	16	16	92	108	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
593							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	38-	2089	49	179	5175	5977	1200
3	34-	1789	44	144	3776	4172	1200
10	29-	1481	39	97	2533	2754	1200
30	24-	1155	33	78	1532	1660	500
100	17-	768	26	50	545	618	500
300	8-	341	16	16	78	92	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
591							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	38-	1934	49	271	4937	6402	1200
3	34-	1644	44	210	3429	4529	1200
10	29-	1323	39	130	2720	3539	1200
30	23-	1008	34	101	1371	1441	500
100	16-	646	26	84	513	545	500
300	8-	260	16	16	57	67	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
583							

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# Calculated Fallout Contours

## ("H+1" Dose Rate Contours)

.001 YIELD ( MEGATONS ) 20 WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	35-	3994	43	126	7860	7976	2100
3	31-	3413	39	103	5478	5576	2100
10	26-	2715	34	78	3385	3385	1200
30	20-	2045	28	57	1799	1843	1200
100	12-	1219	19	34	575	644	500
1000	1-	141	4	4	7	9	
10000							
30000							
MAXIMUM DOSE							
314							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	35-	3808	43	156	9010	9415	2100
3	31-	3240	39	125	5827	6420	2100
10	26-	2545	34	89	3571	3596	1200
30	20-	1895	28	62	1805	1869	1200
100	12-	1106	19	36	565	625	500
1000	1-	95	4	4	5	6	
10000							
30000							
MAXIMUM DOSE							
313							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	35-	3527	44	231	11587	12905	2100
3	31-	2942	39	175	7344	8177	2100
10	26-	2263	34	118	3901	4253	1200
30	20-	1612	28	73	1830	1878	1200
100	12-	898	19	39	498	551	500
1000	1-	46	4	4	2	3	
10000							
30000							
MAXIMUM DOSE							
312							

8-24-59-2

Table I-1  
Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.001 YIELD ( MEGATONS ) 40 WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	33-	7881	40	111	12841	12798	4500
3	28-	4844	35	89	8418	8360	3200
10	22-	4814	29	65	4734	4720	2100
30	16-	3168	23	43	2213	2199	1200
100	6-	1432	12	22	476	500	500
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
199							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	33-	6909	40	136	14436	14400	4500
3	28-	5765	35	105	9255	9425	3200
10	22-	4288	29	72	4899	4883	2100
30	16-	2895	23	46	2143	2084	1200
100	6-	1594	12	22	418	456	500
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
199							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	33-	6338	40	195	17899	19482	4500
3	28-	5121	35	144	10804	11621	3200
10	22-	3721	29	91	5151	5375	2100
30	16-	2480	23	52	1959	1989	1200
100	6-	1084	12	23	334	367	500
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
199							

Table I-2  
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# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.001 YIELD ( MEGATONS ) 60 WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	31-	10242	38	103	16875	16808	6000
3	27-	6377	33	77	10716	10716	4500
10	20-	4777	27	51	5415	5339	3200
30	13-	3094	20	34	2798	2793	2100
100	1-	1283	5	16	242	313	500
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
151							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	31-	9729	38	125	18414	19139	6000
3	27-	7848	33	94	11414	11657	4500
10	20-	5682	27	63	5688	5629	3200
30	13-	3844	20	37	2157	2069	2100
100	1-	1172	5	15	241	285	500
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
148							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	31-	8849	38	176	22823	24950	6000
3	27-	6994	33	125	13049	13828	4500
10	20-	4860	27	76	5670	5836	3200
30	13-	2860	20	40	1872	1811	2100
100	1-	943	5	15	195	223	500
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
139							

Table I-3  
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# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.003 YIELD (MEGATONS) 0 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	229-	104	291	291	1491	1824	
3	213-	89	271	271	1227	1205	
10	193-	74	244	244	989	1032	
30	174-	60	221	221	776	810	
100	149-	44	190	190	564	576	
300	123-	30	154	154	343	374	
1000	85-	14	108	108	183	167	
3000							
10000							
30000							
MAXIMUM DOSE							
2973							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	222-	98	433	469	2242	2352	
3	205-	83	390	390	1874	1941	
10	185-	68	346	346	1482	1546	
30	164-	53	291	291	1137	1182	
100	138-	38	229	229	774	801	
300	108-	23	131	131	460	473	
1000	65-	8			140	142	
3000							
10000							
30000							
MAXIMUM DOSE							
1799							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	212-	90	845	845	3826	4009	
3	194-	75	774	774	3142	3283	
10	173-	60	689	689	2417	2514	
30	151-	45	600	600	1781	1844	
100	122-	30	484	484	1119	1149	
300	87-	15	346	346	543	585	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
949							

Table I-4  
Supplement to  
WSEG RM No. 10

8-24-58-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.003 YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	43-	4121	53	285	16386	17294	3200
3	39-	3599	48	221	11419	12813	2100
10	34-	2914	43	163	6981	7953	2100
30	28-	2290	37	116	3953	4227	1200
100	21-	1548	30	67	1714	1672	500
300	12-	900	21	39	508	567	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
844							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	43-	3798	53	436	23702	26324	2100
3	39-	3239	48	362	14770	18124	2100
10	34-	2571	43	286	8900	9241	1200
30	28-	1950	37	165	4356	5141	500
100	21-	1244	30	82	1444	1626	
300	12-	653	21	37	349	389	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
834							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	43-	3455	54	753	38100	41380	2100
3	39-	2949	45	562	21778	23440	2100
10	33-	2200	45	346	10803	12841	1200
30	28-	1548	39	222	4949	5941	500
100	20-	913	31	111	1320	1428	
300	12-	387	21	21	114	133	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
797							

Table I-5  
Supplement to  
WSEG RM No. 10

8-24-58-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.003 YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	41-	75.64	48	241	26517	28751	4500
3	34-	64.08	44	187	17740	18950	4500
10	30-	50.89	38	135	10229	10811	3200
30	24-	37.76	32	90	5239	5382	2100
100	16-	22.97	24	50	1781	1816	1200
300	9-	9.99	12	23	326	358	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
4.86							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	41-	69.01	46	287	37353	42225	4500
3	34-	57.50	44	201	23233	25489	4500
10	30-	43.79	38	150	11939	13165	3200
30	24-	30.97	32	119	5245	5825	2100
100	16-	17.31	24	54	1489	1831	1200
300	9-	7.60	12	20	218	226	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
4.36							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	41-	61.94	49	429	53103	61605	4500
3	34-	49.83	44	304	31193	35251	4500
10	30-	36.12	39	278	14137	15899	3200
30	24-	23.85	32	150	5132	5409	2100
100	16-	11.34	24	62	958	1119	1200
300	9-	3.14	12	12	51	60	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
4.36							

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Table I-6  
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# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.003 YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	38-	134.68	45	206	42002	44509	9600
3	33-	112.95	40	154	26540	27826	7700
10	27-	85.22	34	104	13685	14002	4500
30	20-	58.67	27	64	6082	6082	3200
100	10-	29.25	17	31	1499	1499	1200
300	4.05	6.27		7	22	111	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
3.21							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	38-	123.49	45	323	54575	62810	7700
3	33-	99.27	40	231	32816	34120	6000
10	27-	71.53	34	145	15154	16332	4500
30	20-	45.68	27	79	5431	5725	3200
100	10-	20.58	17	33	1040	1083	1200
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
2.89							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	38-	108.83	45	516	78403	88484	7700
3	33-	84.10	40	347	41315	44079	6000
10	27-	56.37	34	195	18446	17321	3200
30	20-	32.25	27	97	4290	4931	2100
100	10-	12.51	17	34	604	671	500
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
2.22							

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Table I-7  
Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD ( MEGATONS ) 0.003 WIND ( KNOTS ) 60

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	36-	19841	4.3	188	53079	57604	11700
3	31-	15873	38	139	32848	34129	9400
10	24-	11341	31	89	19954	19643	7700
30	17-	7384	24	53	6842	6642	4500
100	6-	3886	12	23	1119	1099	1200
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
229							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	36-	17269	4.3	209	70816	78270	11700
3	31-	13813	38	199	39334	42377	9600
10	24-	9369	31	119	18436	17440	6000
30	17-	5859	24	62	5298	5370	3200
100	6-	2872	12	23	761	782	1200
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
229							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	36-	14978	4.3	453	94988	106757	9600
3	31-	11223	38	294	46784	51985	7700
10	24-	7081	31	156	19959	17382	4500
30	17-	3788	24	70	3927	4116	2100
100	6-	1230	12	24	400	443	580
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
186							

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Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD ( MEGATONS ) 0.01 WIND ( KNOTS ) 0

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	369-	593	652	652	11461	11699	500
3	543-	523	602	602	9443	10075	
10	488-	446	541	541	7497	8103	
30	432-	385	479	479	5570	5990	
100	381-	294	399	399	3813	3858	
300	310-	153	310	310	1950	2110	
1000	148-	43	163	163	471	486	
3000							
10000							
30000							
MAXIMUM DOSE							
1506							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	564-	539	1153	1153	18991	19942	
3	514-	508	1055	1055	15125	16972	
10	458-	416	936	936	11907	12845	
30	397-	313	812	812	8456	9069	
100	318-	201	650	650	4990	5305	
300	223-	98	455	455	2186	2296	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
840							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	535-	521	2139	2139	32725	38497	
3	484-	458	1937	1937	26805	29989	
10	422-	355	1687	1687	19184	20598	
30	385-	252	1421	1421	12702	13565	
100	284-	139	1056	1056	6331	6685	
300	134-	36	537	537	1389	1435	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
440							

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Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours

("H+1" Dose Rate Contours)

YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	71-	7040	86	649	64150	74762	4500
3	64-	4041	79	514	43113	49329	4500
10	54-	4871	70	381	26328	29482	3200
30	47-	3761	61	256	14245	15333	2100
100	38-	2509	50	144	5623	5763	1200
300	28-	1366	36	71	1879	1872	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
987							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	71-	6431	86	1124	99050	114828	4500
3	64-	5297	81	841	63610	72163	3200
10	54-	4216	72	564	37992	37998	2100
30	47-	3096	63	373	15820	16406	1200
100	38-	1881	51	191	5019	5748	500
300	28-	936	36	84	1096	1256	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
980							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	76-	5796	97	1813	148001	167091	4500
3	63-	4733	89	1381	88077	104057	3200
10	55-	3522	79	877	42593	49225	2100
30	46-	2453	66	486	17019	18777	1200
100	34-	1265	55	205	3434	4166	500
300	28-	511	38	38		321	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
870							

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Table I-10  
Supplement to  
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# Calculated Fallout Contours

("H+1" Dose Rate Contours)

YIELD (MEGATONS) .01 WIND (KNOTS) 20

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	67-	12834	79	570	104975	118631	7700
3	59-	10757	72	435	67486	73882	7700
10	50-	8369	63	298	36740	39413	6000
30	41-	6182	53	188	17167	18133	3200
100	28-	3605	40	99	5672	5672	2100
300	12-	1593	23	42	1061	1061	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
846							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	67-	11595	79	950	152037	172957	7700
3	59-	9468	72	692	91191	103486	6000
10	50-	7037	63	445	44317	49869	4500
30	41-	4784	54	259	17706	19626	3200
100	28-	2503	41	112	4310	4443	1200
300	12-	991	23	45	637	706	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
599							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	67-	10271	82	1523	220045	247846	4000
3	59-	8097	74	1089	120256	135671	4000
10	50-	5644	65	625	50208	55048	3200
30	40-	3444	55	331	16097	18236	2100
100	27-	1549	41	114	2847	2847	1200
300	11-	517	23	23	197	192	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
496							

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Table I-11  
Supplement to  
WSEG RM No. 10



# Calculated Fallout Contours

("H+1" Dose Rate Contours)

.01 YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	42-	23000	73	404	181142	178337	16500
3	54-	12814	44	297	47945	47945	16000
10	48-	12912	54	229	47945	47945	16000
30	34-	9318	44	138	19319	19319	6000
100	19-	4884	30	60	4324	4288	2100
300	147	1285		22	338	464	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
418							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	42-	20580	73	783	228268	233264	14000
3	54-	14171	44	537	124405	124405	11700
10	48-	11542	54	377	124405	124405	11700
30	34-	6894	44	167	1776	18049	4500
100	19-	2922	30	62	2949	2844	1800
300	200	798		20	172	310	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
309							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	42-	17932	74	1247	309501	350538	11700
3	54-	12391	44	894	132626	169716	9600
10	48-	8609	54	494	32253	57234	6000
30	34-	4818	44	192	12310	13733	3200
100	19-	1678	31	63	1711	1676	1200
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
270							

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Table I-12  
Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours

("H+1" Dose Rate Contours)

.01 YIELD (MEGATONS) 60 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	40-	32315	70	437	202730	222453	22100
3	51-	25787	62	313	117531	124884	16000
10	41-	18335	52	193	53223	55483	11700
30	29-	11478	41	105	19082	18922	7700
100	12-	4791	23	43	3417	3069	2100
300	492	530		3	2	58	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
302							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	40-	20425	70	491	276504	309327	19800
3	51-	21799	62	444	144024	159101	14800
10	41-	14382	52	288	53917	59476	9600
30	29-	8054	41	124	18185	19747	4500
100	12-	2969	23	44	2141	2060	1800
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
282							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	40-	24321	70	1077	366783	412647	14800
3	51-	17404	62	671	166876	186034	11700
10	41-	10424	52	327	49632	53795	6000
30	29-	5045	41	140	10477	11119	3200
100	12-	1644	23	43	1177	1120	800
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
230							

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Table I-13  
Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.03 YIELD ( MEGATONS ) 0 WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	1180--	1180	1290	1290	47329	47373	7700
3	1080--	1031	1185	1185	39499	39388	6000
10	900--	893	1066	1066	31150	30949	4500
30	600--	597	788	788	23731	23648	3500
100	400--	402	543	543	17181	17118	2100
300	318--	302	363	363	11732	11660	1500
1000	164--	83	181	181	599	622	500
30000							
MAXIMUM DOSE							
1149							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	1127--	1094	2297	2297	79181	80193	6000
3	1026--	948	2091	2091	64996	65919	4500
10	903--	829	1840	1840	49858	50040	3500
30	773--	702	1576	1576	36399	36496	2100
100	600--	542	1222	1222	21957	22301	1500
300	377--	281	769	769	7426	7946	500
1000							
30000							
MAXIMUM DOSE							
916							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	1046--	1021	4264	4264	137829	139772	6000
3	999--	893	3836	3836	110543	111860	4500
10	886--	753	3302	3302	81379	81867	3500
30	681--	625	2725	2725	55176	55938	2100
100	478--	481	1902	1902	25430	27685	1500
300	300--	18	380	380	468	675	500
1000							
30000							
MAXIMUM DOSE							
314							

Table I-14  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.03 YIELD ( MEGATONS ) 10 WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	139--	10743	167	1398	297382	232185	7700
3	122--	9185	153	1072	137365	136491	6000
10	108--	7960	137	766	64174	60235	4500
30	81--	5919	97	516	33174	32035	3500
100	68--	3749	70	340	17029	17918	2100
300	43--	2048	5	149	4462	4940	1500
1000		608		35	251	336	500
30000							
MAXIMUM DOSE							
1107							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	135--	9804	175	2291	308300	258052	6000
3	121--	8365	160	1718	198156	228446	4500
10	105--	6365	143	1180	105316	118111	3500
30	81--	4541	100	766	54174	58421	2100
100	67--	2761	72	340	15478	18148	1500
300	41--	1331		195	3174	3338	500
1000							
30000							
MAXIMUM DOSE							
928							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	133--	8801	202	3866	468827	542486	6000
3	119--	7142	185	2799	278136	320134	4500
10	103--	5296	164	1779	132519	150891	3500
30	86--	3578	142	1028	52094	59166	2100
100	64--	1865	113	495	12008	13774	1500
300	37--	776	78	169	1902	2158	500
1000							
30000							
MAXIMUM DOSE							
819							

Table I-15  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.03 YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	127-	19544	151	1164	323754	340021	14000
3	113-	16348	137	881	227867	227867	11700
10	98-	12695	120	606	112240	121344	7700
30	78-	9173	102	387	52953	54209	6000
100	54-	5378	78	197	18542	18411	3200
300	23-	2362	46	85	3229	3200	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
777							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	127-	17609	153	1936	478071	539409	11700
3	113-	14327	139	1408	280809	319304	9400
10	98-	10587	122	883	135347	148155	7700
30	78-	7141	104	519	53657	58904	4500
100	53-	3482	79	229	12760	13424	2100
300	23-	1431	46	86	1929	1943	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
628							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	126-	15872	161	3144	689949	778365	14000
3	112-	12213	146	2184	371843	422843	9400
10	98-	8444	127	1269	153041	170242	7700
30	77-	5130	108	642	48784	54181	6000
100	52-	2221	82	252	8026	8988	3200
300	21-	784	46	85	992	1078	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
496							

Table I-16  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

.03 YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	119-	35116	140	987	497285	546172	22100
3	104-	28510	123	721	293110	324288	19200
10	85-	20941	107	462	143933	152783	14000
30	65-	13991	86	266	57500	58565	7700
100	37-	6808	59	118	13246	12899	3200
300	93	1943	45	45	1268	1448	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
446							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	119-	31130	140	1562	695941	776670	22100
3	104-	24349	126	1100	380975	423434	18500
10	85-	16834	106	642	156951	174491	11700
30	65-	10181	86	332	50379	53295	6000
100	37-	4286	59	126	8677	8977	2100
300	114	1173	44	44	665	895	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
428							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	118-	24995	142	2512	953225	1048225	19200
3	103-	20117	127	1631	443875	517979	14000
10	85-	12495	109	859	154286	171967	7700
30	68-	6448	89	387	38252	40883	4500
100	34-	2414	59	132	4936	5086	1200
300	258	634	32	32	177	444	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
335							

Table I-17  
Supplement to  
WSEG RM No. 10

8-24-59-2



# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD (MEGATONS) 0.03 WIND (KNOTS) 60

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	113-	49071	134	687	625472	489534	32000
3	98-	39007	119	630	358607	368789	25200
10	78-	17912	100	384	156330	146796	16500
30	57-	7172	79	209	56376	58524	9600
100	34-	2137	45	85	10294	9615	3200
300	24-	999		20	147	432	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
330							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	113-	43023	134	1403	850982	950342	28500
3	98-	32805	119	935	437040	483218	22100
10	78-	21477	100	517	162351	175028	14000
30	57-	11910	79	247	44453	46410	7700
100	34-	4366	45	88	6302	6074	2100
300	24-	846		15	41	265	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
318							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	113-	36689	135	2178	1120744	1259148	25200
3	98-	26373	120	1345	504118	559464	16500
10	78-	15447	100	658	147405	160560	9600
30	57-	7380	79	277	30584	32328	4800
100	34-	2401	45	90	3415	3431	1200
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
272							

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD (MEGATONS) 0 WIND (KNOTS) 0

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	2210-	2174	2400	2405	146197	165421	140639
3	2029-	1968	2204	2204	111039	130660	109509
10	1810-	1736	1966	1966	84552	83513	84552
30	1584-	1506	1720	1720	55187	56107	55187
100	1292-	1254	1403	1403	29272	29356	29272
300	950-	662	1031	1031	1444	1816	1444
1000	247-	113	268	268			
3000							
10000							
30000							
MAXIMUM DOSE							
1091							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	2109-	2102	4292	4292	273439	283898	232431
3	1918-	1872	3904	3904	178210	177904	177904
10	1685-	1618	3429	3429	129538	130007	129538
30	1439-	1364	2929	2929	76102	77291	76102
100	1109-	1069	2258	2258	27906	28317	27906
300	681-	621	1385	1385			
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
582							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	1994-	1946	7974	7974	492432	494026	394439
3	1791-	1734	7163	7163	309379	309439	291491
10	1538-	1479	6153	6153	208330	201491	192566
30	1285-	1247	5058	5058	103731	103731	103731
100	871-	798	3484	3484	90656	91314	90656
300							
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
296							

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	250-	16129	314	2678	617108	688715	11700
3	225-	13818	291	2126	418709	469026	9600
10	195-	11177	260	1544	249407	275878	7700
30	165-	8572	229	1045	138447	147885	6000
100	131-	5872	188	620	58494	58495	3200
300	88-	3368	141	324	17119	17674	2100
1000	19-	1194	56	123	1988	2272	500
10000							
30000							
MAXIMUM DOSE							
1485							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	248-	14711	328	2885	938109	1077631	9600
3	225-	12294	312	2480	604008	687494	7700
10	195-	9478	279	2064	322633	373035	6000
30	165-	7182	244	1540	160184	179331	4500
100	128-	4411	200	795	52711	56494	3200
300	84-	2219	149	349	12229	13361	2100
1000	13-	683	49	95	927	996	500
10000							
30000							
MAXIMUM DOSE							
1161							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	244-	13845	416	7853	1422287	1621935	9400
3	218-	10825	383	5641	899465	979436	7700
10	190-	8225	342	3402	417041	469206	6000
30	159-	5599	291	2453	140885	1592294	4500
100	120-	3918	239	1437	44084	48640	3200
300	74-	1842	170	384	7039	8046	2100
1000							500
10000							
30000							
MAXIMUM DOSE							
980							

Table 1-20  
Supplement to  
WSEG RM No. 10

8-24-58-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	238-	29374	282	2328	949840	1082942	19200
3	210-	24680	267	1779	628405	694619	14500
10	180-	19240	227	1225	329483	374177	11700
30	148-	14177	195	795	164428	179949	9600
100	107-	8629	152	414	54242	54896	4500
300	54-	4118	99	191	12874	12493	2100
1000	421	670		37	130	637	500
10000							
30000							
MAXIMUM DOSE							
1077							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	234-	26497	268	2842	1431979	1613199	14500
3	208-	21480	242	2037	864442	972507	14000
10	179-	14815	231	1824	426095	496112	9600
30	148-	11173	199	1088	178012	193497	7700
100	104-	6007	155	497	43498	47701	3200
300	58-	2512	100	201	8045	8085	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
908							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	232-	23501	311	6250	2084297	2367282	14500
3	208-	18945	283	4449	1163085	1313422	11700
10	177-	13074	249	2650	497630	551636	7700
30	145-	8182	213	1403	148434	163546	4500
100	102-	3794	165	569	32087	34456	2100
300	50-	1336	103	202	4104	4387	500
1000							
10000							
30000							
MAXIMUM DOSE							
619							

Table 1-21  
Supplement to  
WSEG RM No. 10

8-24-58-2

# Calculated Fallout Contours

("H+1" Dose Rate Contours)

YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	220-	32864	299	1976	1482082	1441275	39700
3	193-	43177	234	1491	965346	968764	28800
10	161-	28171	202	1042	443726	478280	22100
30	128-	14889	119	544	188665	198794	14000
100	78-	7401	61	240	48140	44624	4000
300	18-	3942		104	6702	6487	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
622							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	219-	44999	241	3195	2111293	2349183	32000
3	193-	37140	238	2238	1179103	1312179	25200
10	161-	26097	203	1345	509985	554724	16500
30	128-	16873	166	716	172663	184392	9600
100	78-	7353	120	287	33241	33312	4500
300	18-	2348	40	103	3834	3823	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
888							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	219-	40870	246	5104	2984685	3299830	28500
3	193-	30876	240	3364	1472999	1641713	19200
10	160-	19940	207	1818	523982	573870	11700
30	128-	10994	172	882	139398	148251	6000
100	77-	4180	122	301	19789	20122	2100
300	18-	1210	37	105	1578	2021	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
448							

Table 1-22  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours

("H+1" Dose Rate Contours)

YIELD (MEGATONS) 60 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	210-	74006	248	1771	1880325	2044888	48000
3	182-	59281	221	1271	1094443	1186913	39400
10	149-	42623	186	793	509434	532998	28500
30	112-	27422	152	446	190212	193079	14500
100	58-	12524	98	189	39934	37309	4000
300	202	2985		69	2911	3461	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
435							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	210-	45102	248	2827	2595549	2906045	43700
3	183-	30175	222	1913	1370644	1513832	32000
10	149-	19424	189	1099	532246	574916	21100
30	112-	12453	152	590	184910	184910	11400
100	58-	7492	98	250	29127	24348	4500
300	214	1841		68	1660	2204	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
421							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	210-	59830	251	4434	3482913	3902826	32700
3	183-	40761	224	2794	1420222	1798787	25200
10	149-	24673	190	1418	507375	552688	16500
30	111-	12375	154	620	114425	121698	7700
100	57-	4249	96	206	14081	13916	2100
300	266	974		63	823	1224	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
378							

Table 1-23  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD (MEGATONS) 0 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	3446-	3385	3786	3791	410649	406810	500
3	3174-	3131	3461	3484	348472	345033	500
10	2848-	2742	3103	3112	278271	274160	500
30	2508-	2486	2735	2735	215121	212009	
100	2078-	2032	2265	2265	144684	144231	
300	1585-	1495	1729	1729	84118	83657	
1000	733-	643	799	799	17073	17286	
3000							
10000							
30000							
MAXIMUM DOSE							
1.387							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	3294-	3271	6710	6710	686418	691886	
3	3008-	2964	6127	6127	575810	574692	
10	2659-	2592	5417	5417	448360	446786	
30	2299-	2253	4675	4675	332242	334006	
100	1814-	1780	3696	3696	206408	209009	
300	1220-	1207	2489	2489	99548	94726	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
742							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	3121-	3103	12482	12482	1214900	1220360	
3	2818-	2763	11268	11268	986516	987760	
10	2442-	2391	9764	9764	739081	741289	
30	2040-	2021	8157	8157	515597	520239	
100	1478-	1423	5910	5910	267891	269293	
300	917-	878	2448	2448	44886	44810	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
378							

Table 1-24  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD (MEGATONS) .3 WIND (KNOTS) 10

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	408-	21940	528	4581	1427123	1408161	14000
3	372-	18942	488	3640	989796	1104436	11700
10	328-	15534	440	2705	610004	673873	9400
30	283-	12319	391	1933	349183	382708	7700
100	227-	8706	328	1185	157495	166336	6000
300	164-	5444	259	645	56979	58569	3200
1000	71-	2293	149	276	10203	10262	1200
3000							
10000							
30000							
MAXIMUM DOSE							
2600							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	408-	20100	582	7815	2199454	2317018	14000
3	348-	17052	537	6065	1450787	1659909	11700
10	324-	13594	483	4260	831395	935684	9400
30	279-	10346	428	2858	431284	474930	6000
100	221-	6781	358	1823	163259	178479	4500
300	157-	3777	279	795	46518	49159	2100
1000	80-	1327	151	288	5784	6284	500
3000							
10000							
30000							
MAXIMUM DOSE							
1916							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	396-	18201	758	13319	3386997	3889904	11700
3	358-	15090	698	9982	2117306	2422241	9400
10	313-	11577	621	6738	1100689	1258374	7700
30	264-	8315	546	4136	502584	557874	6000
100	204-	4878	449	2097	150891	167482	3200
300	138-	2301	337	901	31578	34826	1200
1000	29-	637	132	217	2201	2274	500
3000							
10000							
30000							
MAXIMUM DOSE							
1241							

Table 1-25  
Supplement to  
WSEG RM No. 10

8-24-59-2



# Calculated Fallout Contours

("H+1" Dose Rate Contours)

YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	383-	40146	449	3995	2250763	2517952	25200
3	346-	34027	426	3083	1505444	1444493	22100
10	300-	27088	379	2182	864889	938793	16800
30	283-	20958	331	1473	451221	481325	14000
100	191-	13348	248	831	171560	176715	7700
300	120-	7204	194	407	48130	46796	4500
1000	6	2058	149	149	4686	4632	500
10000							
30000							
100000							
MAXIMUM DOSE							
1674							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	382-	36417	479	6648	3364768	3842850	25200
3	344-	30193	439	4982	2124394	2389900	19200
10	299-	23161	390	3336	1109737	1229188	14000
30	251-	16439	340	2081	500936	552184	11700
100	190-	10181	275	1091	151811	164156	6000
300	118-	4987	197	442	32225	32642	2100
1000	47	1163	146	146	2321	2762	500
10000							
30000							
100000							
MAXIMUM DOSE							
1448							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	379-	32547	531	1111	5024669	5748734	22100
3	340-	26309	486	7971	2939999	3324099	16500
10	294-	19103	431	5009	1363906	1526217	11700
30	246-	12468	374	2861	524019	581321	7700
100	183-	6452	300	1224	120075	127557	4500
300	109-	2993	210	475	19652	20146	1200
1000	434	529	146	146	74	781	500
10000							
30000							
100000							
MAXIMUM DOSE							
1023							

Table 1-26  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours

("H+1" Dose Rate Contours)

YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	340-	72444	425	3392	3500087	3890981	48000
3	320-	60169	384	2550	2214037	2422954	39600
10	272-	46023	338	1719	1164030	1250187	28500
30	220-	32886	297	1077	535725	599541	22100
100	151-	18844	218	542	162867	181763	11700
300	84-	8086	125	233	31910	29848	3200
1000							
3000							
10000							
MAXIMUM DOSE							
951							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	340-	65071	429	5570	5098173	5724963	43700
3	320-	52396	389	4005	2976982	3316378	35700
10	271-	38163	340	2526	1386924	1524733	25200
30	220-	25950	289	1440	530391	577103	16500
100	150-	12764	219	629	124520	127580	7700
300	83-	4875	125	241	19552	18606	2100
1000							
3000							
10000							
MAXIMUM DOSE							
904							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	339-	57193	442	9049	7260291	8180849	39600
3	319-	44322	401	6191	3861363	4241398	28500
10	270-	30125	351	3579	1543133	1708736	19200
30	218-	17954	297	1820	478921	519647	11700
100	148-	7657	224	693	61155	64986	4500
300	80-	2612	126	247	10479	10380	1200
1000							
3000							
10000							
MAXIMUM DOSE							
768							

Table 1-27  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD ( MEGATONS )  WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	346-	102176	406	3069	4474001	4942181	67200
3	308-	63213	346	2252	2724978	2994400	52500
10	258-	61797	317	1470	1346666	1432842	39000
30	198-	40833	253	876	585823	591842	25200
100	124-	21835	186	406	140324	140324	11700
300	20-	7626	65	143	20877	19458	2100
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
640							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	346-	90680	408	4942	6336902	7094815	62100
3	308-	71470	346	3474	3535006	3916969	48000
10	258-	50079	318	2087	1514396	1650430	32000
30	198-	31219	244	1117	521160	551469	19200
100	123-	14100	188	448	99743	100194	7700
300	20-	4542	65	165	12162	11844	2100
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
644							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	345-	78738	414	7952	8762491	9878238	52500
3	304-	59319	373	5236	4398290	4903431	39000
10	253-	38247	322	2947	1569075	1721499	25200
30	198-	21042	287	1341	420042	447880	14000
100	122-	8104	190	478	60631	61744	4500
300	18-	2431	62	165	6366	6341	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
589							

Table 1-28  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

YIELD ( MEGATONS )  WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	4908-	4846	5559	5432	684518	870949	1000
3	4630-	4514	5150	5197	754289	746950	1000
10	4190-	4122	4650	4674	461749	479683	1000
30	3743-	3592	4163	4163	487624	344346	226262
100	3182-	3012	3539	3539	349484	221786	88733
300	2565-	2483	2853	2853	221786	88733	
1000	1642-	1451	1826	1826	88559		
3000							
10000							
30000							
MAXIMUM DOSE							
2306							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	4797-	4492	9815	9815	1440931	1463048	
3	4413-	4289	9028	9028	1233011	1243849	
10	3948-	3849	8077	8077	990802	991805	
30	3470-	3335	7100	7100	760853	758912	
100	2850-	2749	5844	5844	512649	514545	
300	2148-	2042	4395	4395	285616	289283	
1000	855-	706	1748	1748	39882	42853	
3000							
10000							
30000							
MAXIMUM DOSE							
1254							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	4567-	4144	18255	18255	2579131	2599843	
3	4141-	4099	16431	16431	2150048	2169805	
10	3664-	3557	14647	14647	1655911	1661331	
30	3144-	3020	12566	12566	1214077	1214670	
100	2449-	2433	9790	9790	716366	750695	
300	1566-	1424	6261	6261	292008	294093	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
641							

Table 1-29  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

1 YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	672-	29034	901	7478	3068238	3489993	19200
3	617-	25347	837	6028	2200928	2456607	15400
10	550-	21186	761	4564	1420199	1558174	10000
30	483-	17271	684	3421	870385	954135	6000
100	400-	12868	589	2252	436882	469382	4000
300	310-	8814	485	1342	187369	192279	2400
1000	184-	4604	337	671	48981	50450	1000
3000	7-	1917	54	231	4449	5536	1000
10000							
30000							
MAXIMUM DOSE							
3719							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	646-	26787	1017	12761	4813537	5502797	19200
3	610-	23059	943	10210	3292626	3795794	15400
10	543-	18836	856	7512	1995691	2284604	10000
30	475-	14878	767	5290	1128000	1275712	6000
100	390-	10488	657	3258	500111	556793	4000
300	298-	6586	537	1797	172414	194294	2400
1000	168-	2977	361	703	34705	34753	1000
3000							
10000							
30000							
MAXIMUM DOSE							
2713							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	650-	24440	1376	22100	7522561	8714968	15400
3	593-	20584	1273	16787	4942433	5403082	10000
10	523-	16373	1149	11873	2780831	3151208	6000
30	454-	12387	1022	7935	1405031	1600430	4000
100	365-	8066	863	4385	529637	580599	2400
300	267-	4459	685	2195	143415	162962	1000
1000	123-	1658	411	780	19529	21628	1000
3000							
10000							
30000							
MAXIMUM DOSE							
1963							

Table 1-30  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

1 YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	632-	53487	777	6491	4972888	5518346	33000
3	575-	45998	718	5153	3418299	386457	28000
10	507-	37536	646	3826	2086944	230570	23400
30	437-	29583	573	2722	1185173	1283565	19200
100	348-	20729	480	1667	526610	552076	12000
300	250-	12827	376	913	187487	197467	6000
1000	102-	5322	210	368	33779	33057	2400
3000							
10000							
30000							
MAXIMUM DOSE							
2821							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	630-	48937	809	11074	7581129	8422292	33000
3	573-	41331	746	8873	4970115	5623450	28000
10	504-	32773	671	5973	3122354	34212	23400
30	434-	24796	595	4025	1636151	174212	19400
100	345-	16140	498	2221	533126	573125	12000
300	245-	8935	388	1064	150050	153378	6000
1000	95-	3237	211	392	20813	20524	2400
3000							
10000							
30000							
MAXIMUM DOSE							
2131							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	623-	44218	922	18714	11299849	13181836	28000
3	565-	36481	850	13997	7188665	8145325	23400
10	496-	27820	762	9351	3472155	386457	19200
30	424-	19869	673	5804	1643084	180138	12000
100	333-	11615	558	2840	490939	536850	6400
300	231-	5575	428	1189	104091	10840	2400
1000	71-	1695	206	396	9913	10998	1000
3000							
10000							
30000							
MAXIMUM DOSE							
1434							

Table 1-31  
Supplement to  
WSEG RM No. 10

8-24-59-2



# Calculated Fallout Contours ("H+1" Dose Rate Contours)

1 YIELD ( MEGATONS ) 40 WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	597-	97842	706	5853	7869454	8723116	64000
3	537-	82380	647	4396	5198248	5876049	57000
10	465-	48182	375	2973	2187179	3168114	42000
30	368-	31514	309	2072	1527723	1846579	35000
100	292-	21514	202	1170	8732843	9846579	25000
300	178-	14785	285	575	1578643	1527016	15000
1000	178	4412	208	208	13136	15019	1000
3000							
10000							
30000							
MAXIMUM DOSE							
1582							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	596-	86398	714	9400	11625979	13139937	57000
3	537-	72936	654	7010	7221715	8090321	50400
10	464-	55509	581	4689	3740903	4128747	38400
30	389-	39663	505	2905	1864782	1827636	23400
100	291-	23086	406	1450	507353	507353	14000
300	178-	14988	287	788	1097325	1097325	10000
1000	226	2888	205	205	7288	9379	1000
3000							
10000							
30000							
MAXIMUM DOSE							
1495							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	594-	78791	745	15810	17204016	19468122	50400
3	534-	63114	682	11146	9829669	11145332	42000
10	461-	45991	605	5979	4255492	4255492	32000
30	384-	30161	525	3779	1731637	1908012	19200
100	297-	19275	450	1729	59287	42544	9000
300	171-	12725	294	648	64396	42544	4200
1000	534	1375	157	157	1928	4694	1000
3000							
10000							
30000							
MAXIMUM DOSE							
1145							

# Calculated Fallout Contours ("H+1" Dose Rate Contours)

1 YIELD ( MEGATONS ) 60 WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	574-	138120	675	5190	10217525	11220227	67400
3	514-	115053	514	3909	6501737	7093847	79200
10	439-	88928	463	2701	3850754	3792299	57000
30	360-	64732	403	1713	1767732	1767732	38400
100	259-	38785	359	919	559843	559843	23400
300	127-	18106	225	419	127641	120071	9000
1000	807	2239	82	82	1929	4731	1000
3000							
10000							
30000							
MAXIMUM DOSE							
1123							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	579-	129146	678	6473	14830387	16599568	79200
3	514-	108737	617	6165	8852040	9837007	64000
10	439-	82953	543	3994	4287530	4707779	50400
30	360-	59907	360	2386	1794183	1905821	30000
100	259-	37263	305	1087	434091	469860	15400
300	124-	11339	226	419	82521	78871	9000
1000	871	1477	82	82	684	3014	1000
3000							
10000							
30000							
MAXIMUM DOSE							
1075							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	574-	109595	692	13913	21345917	24077058	71400
3	513-	89229	630	9684	1127091	13149483	57000
10	439-	67227	523	3779	4933870	5473353	38400
30	360-	47227	373	2080	1864449	1816420	23400
100	252-	31156	326	1220	325082	333536	9000
300	123-	6250	227	446	45586	44033	2000
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
931							

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	40-	4.388	48	143	9809	9935	2100
3	36-	3829	44	123	7370	7474	2100
10	31-	3217	39	97	4721	4947	2100
30	26-	2599	34	76	3190	3195	1200
100	20-	1989	28	54	1622	1606	1200
300	13-	1198	20	35	610	673	500
1000		83	3	3	4	4	
3000							
10000							
30000							
MAXIMUM DOSE							
1032							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	40-	4200	48	178	11518	11883	2100
3	36-	3653	44	152	8387	8814	2100
10	31-	3040	39	117	5398	5623	2100
30	26-	2437	34	88	3351	3421	1200
100	20-	1750	28	56	1626	1621	1200
300	13-	1095	20	37	579	639	500
1000		59	3	3	3	3	
3000							
10000							
30000							
MAXIMUM DOSE							
1031							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	40-	3923	48	270	15562	16780	2100
3	36-	3385	44	224	10606	12029	2100
10	31-	2760	39	159	6578	6988	2100
30	26-	2175	34	117	3570	4052	1200
100	20-	1505	28	65	1630	1569	1200
300	13-	903	20	40	582	579	500
1000		29	3	3	1	1	
3000							
10000							
30000							
MAXIMUM DOSE							
1028							

Table II-1  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	42-	2346	53	199	5645	5945	1200
3	38-	2096	49	136	4218	4611	1200
10	34-	1774	44	110	3043	3126	1200
30	29-	1480	39	86	2068	2033	500
100	23-	1151	33	68	1109	1258	500
300	17-	806	26	47	563	605	500
1000	8-	373	16	16	80	94	
3000							
10000							
30000							
MAXIMUM DOSE							
1950							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	42-	2289	53	202	6472	7317	1200
3	38-	1999	49	174	4872	5561	1200
10	34-	1686	44	136	3423	3660	1200
30	29-	1400	39	97	2220	2180	500
100	23-	1071	33	76	1138	1310	500
300	17-	746	26	50	552	599	500
1000	8-	320	16	16	69	81	
3000							
10000							
30000							
MAXIMUM DOSE							
1943							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	42-	2137	54	215	8603	10664	1200
3	38-	1897	50	181	6500	7782	1200
10	34-	1590	45	191	4313	4746	1200
30	29-	1270	40	130	2452	2652	500
100	23-	940	34	98	1242	1481	500
300	17-	633	27	54	505	551	500
1000	8-	237	16	16	51	60	
3000							
10000							
30000							
MAXIMUM DOSE							
1918							

Table II  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

.001 YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	37-	8094	44	131	16620	16716	4500
3	33-	6965	40	107	12060	11814	3200
10	28-	5670	35	86	7740	7662	3200
30	23-	4412	30	65	4557	4505	2100
100	16-	2924	23	42	1996	1953	1200
300	7-	1480	13	23	531	548	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
6.38							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	37-	7745	44	163	18717	19981	4500
3	33-	6618	40	131	13450	13661	4500
10	28-	5338	35	100	8301	8433	3200
30	23-	4110	30	72	4677	4670	2100
100	16-	2690	23	45	1935	1895	1200
300	7-	1349	13	24	479	505	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
6.18							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	37-	7186	44	2441	25186	27641	4500
3	33-	6077	40	185	16258	17718	4500
10	28-	4797	35	135	9494	10238	3200
30	23-	3591	30	91	4920	5172	2100
100	16-	2249	23	51	1740	1815	1200
300	7-	1081	13	24	378	416	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
55.3							

Table II-2  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

.001 YIELD (MEGATONS) 60 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	36-	11543	42	122	22429	22260	6000
3	32-	9823	38	100	15695	15523	6000
10	26-	7831	33	78	9657	9572	4500
30	21-	5891	27	57	5435	5290	3200
100	13-	3605	20	35	2065	1966	1200
300	2-	1421	7	17	346	382	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
496							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	36-	11000	42	150	25612	26064	6000
3	32-	9307	38	121	17433	17721	6000
10	26-	7349	33	89	10314	10350	4500
30	21-	5466	27	63	5477	5394	3200
100	13-	3304	20	36	1915	1862	1200
300	2-	1301	7	17	308	349	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
487							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	36-	10176	42	221	32882	35445	6000
3	32-	8473	38	166	21231	22539	6000
10	26-	6539	33	117	11542	12086	4500
30	21-	4715	27	76	5466	5611	3200
100	13-	2715	20	39	1725	1800	1200
300	2-	1045	7	17	245	279	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
456							

Table II-3  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

.003 YIELD (MEGATONS) 0 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	239-	113	304	304	1603	1686	
3	224-	99	285	285	1375	1443	
10	205-	83	261	261	1132	1184	
30	187-	69	238	238	917	956	
100	165-	53	209	209	689	716	
300	141-	39	179	179	490	507	
1000	109-	24	139	139	282	290	
3000	69-	9	87	87	105	107	
10000							
30000							
MAXIMUM DOSE							
6159							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	232-	107	491	491	2492	2619	
3	217-	93	457	457	2117	2219	
10	197-	77	416	416	1717	1795	
30	178-	63	376	376	1364	1421	
100	154-	47	325	325	992	1029	
300	129-	33	271	271	667	688	
1000	93-	17	196	196	330	338	
3000	37-	3	79	79	49	50	
10000							
30000							
MAXIMUM DOSE							
3706							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	223-	99	889	889	4291	4504	
3	208-	85	822	822	3594	3762	
10	186-	69	742	742	2853	2976	
30	166-	55	660	660	2200	2287	
100	140-	39	557	557	1513	1565	
300	111-	25	442	442	918	944	
1000	67-	9	285	285	309	315	
3000							
10000							
30000							
MAXIMUM DOSE							
1966							

Table II-4  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

.003 YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	48-	4390	57	307	19330	21418	3200
3	44-	3850	53	291	14324	15355	2100
10	39-	3259	48	202	9104	10442	2100
30	34-	2679	43	142	6043	7066	1200
100	28-	2036	37	106	3092	3446	1200
300	21-	1459	30	63	1477	1638	500
1000	12-	788	21	35	419	445	500
3000							
10000							
MAXIMUM DOSE							
2774							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	48-	4077	58	494	28997	31989	3200
3	44-	3542	54	412	20330	23180	2100
10	39-	2936	49	311	12597	14522	2100
30	34-	2361	44	217	8471	9444	1200
100	28-	1724	37	145	3547	3998	1200
300	21-	1147	31	82	1274	1499	500
1000	12-	581	21	29	283	270	500
3000							
10000							
MAXIMUM DOSE							
2741							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	47-	3748	60	859	45192	51216	2100
3	43-	3213	56	696	27752	35712	2100
10	39-	2586	51	511	17679	19015	2100
30	34-	2013	45	346	9742	11114	1200
100	28-	1381	39	170	3743	3758	500
300	21-	862	32	111	1253	1333	500
1000	12-	354	21	21	103	121	
3000							
10000							
MAXIMUM DOSE							
2660							

Table II-5  
Supplement to  
WSEG RM No. 10

8-24-59-2



# Calculated Fallout Contours (Maximum Biological Dose)

.003 YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	48-	8117	53	270	32545	34668	4500
3	41-	7033	49	224	23147	24931	4500
10	36-	5805	44	167	14560	15354	3200
30	31-	4635	39	123	8566	9041	3200
100	24-	3315	32	81	4072	4269	2100
300	17-	2110	25	49	1489	1640	1200
1000	5-	896	12	22	282	306	500
30000							
MAXIMUM DOSE							
1530							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	48-	7505	53	447	47178	53040	4500
3	41-	6104	44	384	31833	35803	4500
10	36-	4908	40	287	18878	20947	3200
30	31-	3998	39	172	10259	10911	2100
100	24-	2725	32	99	4267	4496	1200
300	17-	1636	25	54	1413	1401	500
1000	5-	647	12	16	168	169	
30000							
MAXIMUM DOSE							
1435							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	48-	6829	54	765	71773	82597	4500
3	41-	5615	49	583	43510	52528	3200
10	36-	4412	40	393	24915	28045	3200
30	31-	3298	39	262	11588	13481	2100
100	24-	2072	32	141	3915	4627	1200
300	17-	1121	25	64	978	1142	500
1000	5-	287	12	12	46	54	
30000							
MAXIMUM DOSE							
1416							

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Table II-6  
Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours (Maximum Biological Dose)

.003 YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	43-	14891	49	243	53257	57030	9600
3	38-	12676	45	192	36298	38291	7700
10	33-	10111	40	140	21607	22470	6000
30	27-	7767	34	99	11616	12107	4500
100	20-	5117	27	60	4910	4818	3200
300	11-	2793	18	32	1476	1429	1200
1000	433	560	6	6	12	91	500
30000							
MAXIMUM DOSE							
1049							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	43-	13643	49	388	75086	83396	9600
3	38-	11406	45	297	48222	53368	7700
10	33-	8927	40	206	26442	28763	6000
30	27-	6527	34	134	12956	13775	4500
100	20-	4045	27	72	4531	4619	2100
300	11-	2049	16	35	1104	1130	1200
1000							
30000							
MAXIMUM DOSE							
942							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	43-	12277	50	643	109776	124423	7700
3	38-	10005	45	469	65796	73912	6000
10	33-	7464	40	307	32398	36186	4500
30	27-	5178	34	187	13850	15296	3200
100	20-	2907	27	87	3817	4009	2100
300	11-	1313	16	36	710	741	500
1000							
30000							
MAXIMUM DOSE							
730							

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Table II-7  
Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD ( MEGATONS ) 60 WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	41-	21133	48	224	70147	74377	14000
3	37-	17760	43	174	46510	48649	11700
10	31-	13926	38	123	26556	27061	7700
30	25-	10314	32	85	13745	13795	6000
100	17-	6360	24	49	5033	4895	3200
300	7-	2996	13	24	1188	1152	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
782							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	41-	19247	48	352	95256	106515	11700
3	37-	15861	43	263	60339	65443	9600
10	31-	12013	38	178	31031	33727	7700
30	25-	8512	32	110	14285	14770	6000
100	17-	4900	24	57	4369	4382	3200
300	7-	2160	13	25	834	850	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
736							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	41-	17178	48	580	139711	156739	11700
3	37-	12935	43	413	80033	89243	9600
10	31-	9537	38	289	36458	40513	8000
30	25-	6537	32	191	14204	15176	6000
100	17-	3370	24	67	3322	3557	3200
300	7-	1341	13	25	516	540	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
610							

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Table 11-8  
Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD ( MEGATONS ) 0 WIND ( KNOTS )

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	617-	573	684	684	12710	12764	11150
3	574-	543	636	636	10699	10753	9375
10	528-	510	578	578	8470	8470	7374
30	470-	432	521	521	6833	6833	6123
100	408-	321	449	449	4776	4776	3245
300	338-	220	372	372	3048	3048	1425
1000	237-	109	262	262	1356	1356	85
3000	68-	8	73	73	84	84	
MAXIMUM DOSE							
3990							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	593-	559	1213	1213	21276	21937	18991
3	548-	529	1121	1121	17778	18091	15504
10	494-	484	1009	1009	14327	14504	11539
30	438-	381	896	896	10716	10716	7831
100	348-	269	753	753	7644	7644	4239
300	290-	166	592	592	4002	4002	1115
1000	165-	54	337	337	1115	1115	
3000							
MAXIMUM DOSE							
1782							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	548-	541	2264	2264	37396	39382	33827
3	519-	511	2073	2073	30081	30827	25994
10	461-	421	1842	1842	23715	23715	18155
30	401-	321	1602	1602	16918	16918	10732
100	322-	104	1289	1289	10088	10088	4782
300	229-		914	914	4552	4552	
1000							
3000							
MAXIMUM DOSE							
911							

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Table 11-9  
Supplement to  
WSEG RM No. 10

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	78	7305	93	731	75906	85416	4500
3	72	6407	87	592	53628	60240	4500
10	64	5323	79	447	34239	37840	3200
30	56	4307	71	321	20389	21974	3200
100	47	3165	61	213	10816	10937	2100
300	38	2138	51	133	4916	4949	1200
1000	28	1133	34	67	1083	1207	500
3000	2	102	9	9	20	24	
10000							
30000							
MAXIMUM DOSE							
3844							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	78	6780	96	1259	117559	135622	4500
3	71	5816	89	953	78848	88110	3200
10	64	4715	81	721	48583	54157	3200
30	56	3689	73	496	28111	29197	2100
100	46	2574	63	287	11245	11700	1200
300	38	1631	52	194	4068	4260	500
1000	28	799	36	75	848	949	
3000	1	39	8	8	4	5	
10000							
30000							
MAXIMUM DOSE							
3194							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	77	6184	105	2133	179193	209764	4500
3	71	5189	98	1639	117493	139448	3200
10	63	4079	89	1087	64365	70729	2100
30	55	3094	80	760	31457	37098	1200
100	46	1976	68	427	11242	13971	500
300	38	1189	54	204	3031	3782	
1000	20	456	38	38	244	286	
3000							
10000							
30000							
MAXIMUM DOSE							
2899							

Table II-10  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	74	13846	86	640	123782	136907	9600
3	67	11600	79	509	84108	93219	7700
10	59	9366	72	372	50485	55240	6000
30	51	7315	63	262	28225	30304	4500
100	41	5047	53	161	12332	12881	3200
300	29	3095	42	89	4382	4376	2100
1000	12	1339	23	41	825	870	500
3000							
10000							
MAXIMUM DOSE							
2090							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	74	12364	87	1077	185861	210343	7700
3	67	10382	80	812	120318	132332	7700
10	59	8152	72	567	64313	73129	6000
30	51	6094	64	374	32529	36063	4500
100	41	3935	53	212	12392	13221	2100
300	29	2517	42	110	3531	3846	1200
1000	11	896	23	43	557	609	500
3000							
10000							
MAXIMUM DOSE							
1874							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	74	11135	89	1823	280487	320995	7700
3	67	9123	82	1350	170584	194895	6000
10	59	6876	74	895	85895	97451	4500
30	51	4857	65	554	37604	42722	3200
100	40	2861	55	271	11419	12375	2100
300	29	1460	43	111	2674	2598	500
1000	11	475	23	23	148	174	
3000							
10000							
MAXIMUM DOSE							
1625							

Table II-11  
Supplement to  
WSEG RM No. 10

8-24-59-2



# Calculated Fallout Contours (Maximum Biological Dose)

.01 YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	70-	24681	81	987	196718	214202	16500
3	63-	20674	74	427	158111	139070	14080
10	54-	16180	65	298	71958	78100	9400
30	48-	12017	57	201	34094	38035	7700
100	34-	7592	45	114	13245	13704	4500
300	20-	4072	32	99	3939	3812	2100
1000	164	1131		21	291	434	500
3000							
10000							
30000							
MAXIMUM DOSE							
1382							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	70-	22264	81	915	283269	321007	14000
3	63-	18226	74	679	175167	195154	11700
10	54-	13721	65	448	89431	99407	9400
30	48-	9699	57	280	38459	42742	6000
100	34-	5632	46	143	12137	12732	3200
300	20-	2782	32	64	2887	2811	1200
1000	226	749		19	143	266	500
3000							
10000							
30000							
MAXIMUM DOSE							
1204							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	70-	19787	81	1507	415983	469395	14000
3	63-	15676	74	1049	234374	264237	9400
10	54-	11164	65	646	108428	117691	7700
30	48-	7334	57	383	40143	44414	4500
100	34-	3845	46	174	9654	10571	2100
300	20-	1704	32	68	1840	1841	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
880							

Table II-12  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

.01 YIELD (MEGATONS) 60 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	67-	34814	78	507	254464	277897	22100
3	60-	28773	71	382	159499	173207	19200
10	51-	21974	62	261	89488	90483	14080
30	42-	15753	53	169	40481	41848	9400
100	29-	9327	41	90	13404	13286	6000
300	14-	4453	25	44	3274	3122	2100
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
991							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	67-	31184	78	822	343203	403282	22100
3	60-	25081	71	598	213102	234278	14080
10	51-	18318	62	383	101342	110986	11700
30	42-	12358	53	228	41447	44432	7700
100	29-	6708	41	109	11329	11997	4500
300	14-	2947	25	44	2259	2165	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
926							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	67-	27395	78	1340	516184	578089	19200
3	60-	21844	71	988	277943	310477	14080
10	51-	14594	62	583	114499	127137	9400
30	42-	9071	53	300	39481	42983	6000
100	29-	4374	41	123	8319	8841	2100
300	14-	1795	25	47	1341	1303	1200
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
755							

Table II-13  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) 0 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	1240-	1221	1355	1355	51309	52384	
3	1149-	1115	1256	1256	44647	44647	
10	1040-	977	1137	1137	36171	36171	
30	930-	850	1016	1016	28629	28629	
100	792-	712	865	865	20525	20525	
300	640-	566	699	699	13466	13466	
1000	414-	328	453	453	4915	4915	
3000							
10000							
30000							
MAXIMUM DOSE							
2280							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	1189-	1180	2424	2424	86764	90196	
3	1094-	1053	2230	2230	74358	75189	
10	979-	913	1996	1996	58965	58965	
30	861-	786	1755	1755	45276	45276	
100	710-	646	1446	1446	30560	30560	
300	538-	519	1091	1091	17972	17972	
1000	220-	95	448	448	2111	2213	
3000							
10000							
30000							
MAXIMUM DOSE							
1276							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	1132-	1105	4526	4526	156299	159033	
3	1031-	978	4124	4124	128552	130170	
10	909-	838	3634	3634	98934	98934	
30	780-	710	3119	3119	72528	73600	
100	608-	570	2433	2433	43660	45051	
300	391-	305	1564	1564	18957	17108	
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
680							

Table II-14  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) .03 WIND (KNOTS) 10

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	148-	11043	181	1444	229444	257801	7700
3	134-	9584	168	1174	159500	179250	6000
10	122-	7896	153	866	98034	109119	4500
30	107-	6216	138	632	58639	63774	4500
100	88-	4875	119	408	27297	29821	3200
300	69-	3028	96	244	11540	11874	2100
1000	42-	1570	65	119	3116	3017	500
3000	5-	546	20	31	281	277	500
10000							
30000							
MAXIMUM DOSE							
3297							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	149-	10156	189	2462	352533	398512	6000
3	134-	8644	176	1952	238380	269265	4500
10	121-	6943	160	1411	137697	156571	3200
30	107-	5364	144	968	74376	83182	2100
100	88-	3643	124	579	30911	34141	1200
300	69-	2244	102	320	10419	11610	500
1000	41-	1081	71	144	2191	2484	15
3000	2-	66	14	14	13	15	
10000							
30000							
MAXIMUM DOSE							
3181							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	146-	9218	219	4291	544287	627688	6000
3	134-	7685	204	3190	342823	391801	4500
10	119-	5960	185	2159	183840	208163	3200
30	104-	4385	164	1425	88885	100853	2100
100	86-	2776	142	756	31719	34068	1200
300	65-	1556	116	365	9070	9293	500
1000	37-	646	78	134	1366	1442	
3000							
10000							
30000							
MAXIMUM DOSE							
2485							

Table II-15  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	141-	20281	145	1274	348609	408833	14000
3	128-	17251	152	999	247281	275695	11760
10	113-	13631	137	719	145447	175117	9400
30	97-	10647	122	494	79464	83465	6000
100	78-	7803	102	304	33518	34740	4500
300	56-	4320	80	169	11602	11509	2100
1000	23-	1848	45	77	2304	2295	500
30000							
100000							
300000							
MAXIMUM DOSE							
2463							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	141-	18440	167	2139	553316	624399	11700
3	128-	15368	154	1621	351968	394371	9400
10	113-	11920	139	1122	187866	212056	7760
30	97-	8777	123	729	92864	101485	6000
100	77-	5527	103	404	33107	35561	3200
300	56-	3053	81	201	9527	9826	2100
1000	22-	1194	45	83	1422	1586	500
30000							
100000							
300000							
MAXIMUM DOSE							
1590							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	141-	14938	175	2675	808954	937397	11700
3	128-	12611	162	2046	493780	554206	9400
10	113-	9797	146	1706	239430	269998	6000
30	96-	6964	129	1048	103243	115246	4500
100	77-	3961	108	519	30303	32888	2100
300	56-	1976	84	264	4953	7778	1200
1000	21-	710	45	78	846	893	500
30000							
100000							
300000							
MAXIMUM DOSE							
1639							

Table II-16  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	133-	36784	154	1096	578375	673281	23200
3	120-	30608	141	833	370958	402244	19200
10	104-	23673	129	575	202430	214602	14000
30	87-	17319	109	378	99740	103426	11700
100	66-	10711	87	213	36140	36076	6000
300	39-	5629	62	111	10339	9850	3200
1000	108	1848	44	44	1016	1215	500
30000							
100000							
300000							
MAXIMUM DOSE							
1518							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	133-	33043	154	1809	839742	942956	22100
3	120-	24602	141	1317	503572	558752	10500
10	104-	19884	129	887	27971	289966	14000
30	87-	13743	109	523	106937	113259	9600
100	65-	7804	88	268	31146	33068	4500
300	39-	3828	62	125	7461	7802	2100
1000	131	1076	43	43	575	611	500
30000							
100000							
300000							
MAXIMUM DOSE							
1394							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	133-	29161	156	2970	1207981	1366418	19200
3	120-	22669	143	2067	648788	746947	14000
10	103-	16039	110	1243	290500	320340	9600
30	86-	10284	89	734	106557	116402	6000
100	65-	5282	62	336	23750	27681	3200
300	39-	2340	42	137	4721	5121	1200
1000	300	600	28	28	126	396	500
30000							
100000							
300000							
MAXIMUM DOSE							
1092							

Table II-17  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

1 YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	273-	16327	341	2806	655182	731652	11700
3	282-	14124	318	2270	451836	512650	9400
10	226-	11640	250	1707	286193	318091	7700
30	200-	9318	202	1243	169873	185875	6000
100	168-	6762	158	804	82277	87504	4500
300	133-	4903	121	476	32480	34857	3200
1000	107-	3775	96	353	9777	9766	2500
3000	87-	2950	76	273	1647	1603	2000
10000	72-	2375	61	218	1116	1083	1600
30000	60-	1950	50	178	887	863	1300
MAXIMUM DOSE							
4874							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	272-	14972	367	4840	1014722	1158939	9600
3	280-	12739	341	3753	679257	765693	7700
10	224-	10231	271	2701	396792	443620	6000
30	198-	7911	201	1869	213018	238127	4500
100	168-	5425	144	1144	91401	100482	3200
300	131-	3351	103	643	31864	35191	2100
1000	103-	2621	81	500	17566	17276	1600
3000	83-	2021	61	381	1022	768	1300
10000	69-	1587	50	297	782	768	1000
30000	57-	1257	40	228	622	622	800
MAXIMUM DOSE							
3776							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	267-	13583	453	8249	1567827	1794703	9400
3	245-	11216	421	6292	996659	1142469	7700
10	219-	8785	382	4344	540836	614429	6000
30	192-	6485	344	2837	264067	297842	4500
100	159-	4117	295	1547	95345	103939	3200
300	123-	3313	243	1014	27883	31154	2100
1000	97-	2595	166	647	1000	1000	1600
3000	78-	2047	111	481	782	782	1300
10000	65-	1587	81	361	622	622	1000
30000	53-	1257	61	278	500	500	800
MAXIMUM DOSE							
3015							

Table II-20  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

1 YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	273-	16327	341	2806	655182	731652	11700
3	282-	14124	318	2270	451836	512650	9400
10	226-	11640	250	1707	286193	318091	7700
30	200-	9318	202	1243	169873	185875	6000
100	168-	6762	158	804	82277	87504	4500
300	133-	4903	121	476	32480	34857	3200
1000	107-	3775	96	353	9777	9766	2500
3000	87-	2950	76	273	1647	1603	2000
10000	72-	2375	61	218	1116	1083	1600
30000	60-	1950	50	178	887	863	1300
MAXIMUM DOSE							
3387							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	272-	14972	367	4840	1014722	1158939	9600
3	280-	12739	341	3753	679257	765693	7700
10	224-	10231	271	2701	396792	443620	6000
30	198-	7911	201	1869	213018	238127	4500
100	168-	5425	144	1144	91401	100482	3200
300	131-	3351	103	643	31864	35191	2100
1000	103-	2621	81	500	17566	17276	1600
3000	83-	2021	61	381	1022	768	1300
10000	69-	1587	50	297	782	768	1000
30000	57-	1257	40	228	622	622	800
MAXIMUM DOSE							
2857							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	267-	13583	453	8249	1567827	1794703	9400
3	245-	11216	421	6292	996659	1142469	7700
10	219-	8785	382	4344	540836	614429	6000
30	192-	6485	344	2837	264067	297842	4500
100	159-	4117	295	1547	95345	103939	3200
300	123-	3313	243	1014	27883	31154	2100
1000	97-	2595	166	647	1000	1000	1600
3000	78-	2047	111	481	782	782	1300
10000	65-	1587	81	361	622	622	1000
30000	53-	1257	61	278	500	500	800
MAXIMUM DOSE							
1981							

Table II-21  
Supplement to  
WSEG RM No. 10

8-24-59-2



# Calculated Fallout Contours (Maximum Biological Dose)

1 YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	245-	54227	284	2116	1645141	1810375	35700
3	222-	45128	261	1609	1054134	1146403	28500
10	193-	34956	233	1120	578360	618333	22100
30	164-	25677	204	761	286819	300719	16500
100	126-	16056	167	420	106589	106819	9600
300	82-	8683	124	224	32304	30826	4500
1000	11-	2997	38	100	4682	4702	500
3000							
10000							
30000							
MAXIMUM DOSE							
20.23							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	245-	48692	286	3498	2394217	2688875	32000
3	222-	39915	263	2563	1441617	1599947	25200
10	193-	29383	234	1666	712647	783163	19200
30	164-	20432	205	1032	312431	333954	14000
100	126-	11763	168	534	94287	99676	7700
300	82-	5912	124	259	24553	24407	3200
1000	11-	1985	38	101	3061	3170	500
3000							
10000							
30000							
MAXIMUM DOSE							
19.00							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	245-	42971	292	5795	3472775	3906864	28500
3	221-	33741	268	4046	1930791	2158273	22100
10	192-	23763	239	2473	847657	930537	16500
30	163-	15365	210	1426	318510	347946	9600
100	125-	8014	171	668	79519	85388	4500
300	81-	3718	126	297	17720	17720	2100
1000	9-	1122	35	103	1539	1621	500
3000							
10000							
30000							
MAXIMUM DOSE							
15.66							

Table II-22  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

1 YIELD (MEGATONS) 60 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	237-	76361	273	1917	2115188	2306951	48000
3	213-	47601	250	1435	1307352	1416324	39600
10	182-	35533	221	967	683849	721377	28500
30	153-	23533	191	616	318932	326970	22100
100	111-	19720	151	376	106502	104802	11700
300	63-	9749	103	217	28748	28695	4500
1000	215	2411	67	87	2192	2777	500
3000							
10000							
30000							
MAXIMUM DOSE							
14.23							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	237-	68004	274	3135	3011676	3360144	43700
3	212-	41668	250	2249	1739302	1921429	35700
10	183-	30051	222	1427	808784	879232	25200
30	152-	20018	191	845	329881	347337	16500
100	111-	14054	152	413	86961	91834	7700
300	65-	6894	103	192	20881	20023	3200
1000	228	1835	66	86	1384	1941	500
3000							
10000							
30000							
MAXIMUM DOSE							
13.79							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	237-	59377	277	5089	4255155	4765803	39600
3	212-	45537	253	3469	2248119	2493275	28500
10	183-	30839	224	2052	911890	1000128	19200
30	152-	18947	193	1124	311580	337153	11700
100	111-	9286	153	502	70719	74046	6000
300	62-	4028	103	211	13706	13582	2100
1000	285	914	60	80	534	1131	500
3000							
10000							
30000							
MAXIMUM DOSE							
12.36							

Table II-23  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

.3 YIELD (MEGATONS) 0 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	3615-	3339	3942	3982	453797	447498	500
3	3048-	3307	3640	3691	388114	366272	500
10	2736-	2965	3324	3342	320542	316744	500
30	2348-	2449	2984	2989	254926	252835	500
100	2348-	2260	2560	2560	187635	186093	500
300	1924-	1851	2100	2100	128273	124570	500
1000	1316-	1263	1435	1435	57049	58155	500
3000							
10000							
30000							
MAXIMUM DOSE							
2874							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	3470-	3426	7070	7070	766985	765817	500
3	3200-	3186	6519	6519	653996	654202	500
10	2875-	2817	5857	5857	525215	523613	500
30	2472-	2476	5179	5179	406341	406341	500
100	2138-	2138	4335	4335	274481	274481	500
300	1638-	1547	3337	3337	167941	167995	500
1000	841-	760	1713	1713	42774	43067	500
3000							
10000							
30000							
MAXIMUM DOSE							
1538							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	3307-	3238	13226	13226	1354263	1370185	500
3	3022-	2988	12087	12087	1137474	1141129	500
10	2875-	2816	10700	10700	888610	889301	500
30	2575-	2516	7234	7234	682343	682343	500
100	1838-	1746	5251	5251	418346	418346	500
300	1295-	1239	5020	5020	190256	190717	500
1000							
3000							
10000							
30000							
MAXIMUM DOSE							
783							

Table II-24  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

.3 YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	444-	21938	566	4696	1468794	1650921	14000
3	410-	19065	531	3783	1040138	1157499	11700
10	380-	15847	447	2783	604991	728450	9600
30	330-	12837	389	2133	340750	407050	7700
100	281-	9513	332	1430	204464	250060	5000
300	230-	6570	256	882	92446	108046	4500
1000	162-	3680	157	482	29161	29058	2100
3000	77-	1657	157	249	6682	6771	500
10000							
30000							
MAXIMUM DOSE							
7301							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	440-	20174	626	6070	2290296	2613007	14000
3	407-	17268	585	4386	1556139	1772963	11700
10	367-	14015	486	3298	911807	1057252	9600
30	326-	10700	406	2509	528862	587099	7700
100	285-	7799	345	1869	290595	260192	4500
300	228-	5005	262	1269	146146	146146	3200
1000	155-	2557	276	581	24058	24058	1500
3000	67-	1053	160	273	4348	4809	500
10000							
30000							
MAXIMUM DOSE							
5380							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	432-	18362	815	13894	3581324	4101687	11700
3	398-	15417	759	10664	2326443	2649072	9600
10	357-	12136	626	7550	1295945	1481618	7700
30	315-	9147	543	5095	670096	757282	6000
100	264-	6005	430	2896	247515	285175	3200
300	210-	3850	353	1796	85231	94252	2100
1000	137-	1825	182	818	17862	17862	500
3000	37-	554	150	153	1712	1417	500
10000							
30000							
MAXIMUM DOSE							
3979							

Table II-25  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

3 YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	421-	40302	803	4089	2354920	2619420	25200
3	385-	34477	447	3246	1614702	1777754	22100
10	345-	27950	425	2362	976473	1058804	19200
30	303-	21910	383	1703	554409	594274	14000
100	232-	15369	330	1072	252951	264941	9600
300	196-	9793	273	632	177958	24140	6000
1000	119-	4793	192	317	25399	24140	2100
30000	11-	1676	50	154	3698	4091	500
MAXIMUM DOSE							
5207							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	420-	36742	518	6947	3589639	4055466	25200
3	385-	30857	482	5327	2338714	2614049	19200
10	344-	24299	438	3770	1313711	1459191	16500
30	302-	18323	394	2550	678482	745908	11700
100	250-	12065	339	1484	264824	287059	7700
300	194-	7140	280	802	88910	92444	4500
1000	116-	3212	195	354	18056	18499	2100
30000	7-	1083	39	153	2156	2624	500
MAXIMUM DOSE							
4506							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	418-	33071	576	1179	5450956	6196220	22100
3	381-	27126	534	8705	3356775	3761193	19200
10	340-	20565	485	5885	1727878	1932574	14000
30	298-	14720	435	3751	794846	884894	9600
100	245-	8930	373	1997	265036	287863	6000
300	188-	4804	306	994	72986	77949	4500
1000	108-	1964	208	412	12864	13419	2100
30000	263	564		83	379	1075	500
MAXIMUM DOSE							
3183							

Table II-26  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

3 YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	399-	73333	464	3545	3723455	4106268	48000
3	363-	61526	428	2734	2440406	2657598	39600
10	320-	48350	385	1937	1374950	1480792	32000
30	276-	36312	342	1314	718423	755468	22100
100	219-	23670	286	775	287635	290637	14000
300	157-	13604	224	429	96352	92647	7700
1000	63-	5526	124	206	19089	18048	2100
30000	478	614		30	56	512	500
MAXIMUM DOSE							
3079							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	399-	66138	468	5906	5514121	6172621	43700
3	363-	54240	432	4402	3394188	3775232	35700
10	320-	41108	388	2982	1754480	1921184	25200
30	275-	29405	344	1887	813166	879820	19200
100	219-	17796	288	1012	274568	286505	11700
300	156-	9491	225	511	77792	77502	6000
1000	62-	3723	124	215	13580	12794	1200
30000							
MAXIMUM DOSE							
2927							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	398-	58718	483	9803	8085769	9103077	39600
3	362-	46758	445	7014	4654944	5191722	32000
10	318-	33774	401	4466	2159478	2391792	22100
30	274-	22637	355	2654	869465	944338	17000
100	217-	12478	296	1312	243513	261615	7700
300	154-	6105	231	608	56951	59774	3200
1000	58-	2199	124	232	8040	8229	1200
30000							
MAXIMUM DOSE							
2486							

Table II-27  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) 60 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	386-	103531	446	3233	4817394	5278117	67200
3	349-	64670	410	2450	3059387	3311004	57200
10	308-	46870	366	1491	1657219	1756253	43700
30	258-	27962	321	1112	814983	842133	28500
100	199-	20446	262	628	297302	294251	16500
300	130-	15827	194	337	89805	84362	7700
1000	19-	5422	62	156	13634	13343	1200
3000							
10000							
30000							
MAXIMUM DOSE							
2157							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	386-	92679	447	5324	6983110	7783258	62100
3	349-	74756	411	3883	4145208	4580773	48000
10	308-	51134	367	2535	2024848	2207182	35700
30	258-	35132	322	1550	8744023	931832	25200
100	199-	21468	263	797	247023	273799	14000
300	130-	10874	195	390	69303	67449	6000
1000	19-	3705	61	159	9521	9275	1200
3000							
10000							
30000							
MAXIMUM DOSE							
2104							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	386-	81500	454	8720	10022088	11216583	52500
3	349-	63957	417	6079	5496845	6102482	39600
10	308-	44350	372	4111	2370115	2615845	28500
30	257-	28405	325	2111	861841	950287	16500
100	197-	14751	259	997	222006	234053	9600
300	129-	7465	197	444	49089	48721	4500
1000	16-	2161	58	160	5228	5487	500
3000							
10000							
30000							
MAXIMUM DOSE							
1924							

Table II-28  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

YIELD (MEGATONS) 0 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	5228-	5066	5815	5903	970114	954498	1000
3	4877-	4734	5425	5490	840878	828788	1000
10	4461-	4371	4962	4997	696123	693276	1000
30	4045-	3943	4499	4501	572835	564771	1000
100	3532-	3363	3928	3928	432656	425479	
300	2988-	2834	3324	3324	307295	303978	
1000	2121	1110	2499	2499	170065	171388	
3000	1225-		1363	1363	48068	49995	
10000							
30000							
MAXIMUM DOSE							
4777							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	5036-	4913	10304	10304	1621630	1610333	
3	4671-	4580	9587	9587	1390655	1388744	
10	4235-	4215	8664	8664	1115993	1120013	
30	3794-	3649	7761	7761	912680	912249	
100	3242-	3103	6632	6632	662670	660775	
300	2639-	2569	5399	5399	434750	441654	
1000	1755-	1595	3590	3590	187863	188942	
3000							
10000							
30000							
MAXIMUM DOSE							
2597							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	4817-	4721	19255	19255	2677423	2684863	
3	4434-	4387	17724	17724	2423614	2425743	
10	3972-	3912	15877	15877	1953040	1957020	
30	3497-	3376	13980	13980	1505862	1509332	
100	2889-	2788	11549	11549	1023754	1029915	
300	2192-	2113	8760	8760	582823	592315	
1000	959-	910	3832	3832	104083	112483	
3000							
10000							
30000							
MAXIMUM DOSE							
1329							

Table II-29  
Supplement to  
WSEG RM No. 10

8-24-59-2



# Calculated Fallout Contours (Maximum Biological Dose)

1 YIELD (MEGATONS) 10 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	725-	28744	962	7930	3066239	3489715	19200
3	674-	25191	903	6145	2236068	2496716	15400
10	613-	21219	833	4717	1480535	1617975	12000
30	552-	17528	763	3639	943567	1033570	9000
100	476-	13443	679	2335	514330	544000	6400
300	403-	9759	591	1683	284649	294160	4200
1000	304-	5980	435	1146	93146	91684	2400
3000	189-	3109	342	522	27095	27051	1000
10000							
30000							
MAXIMUM DOSE							
9985							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	719-	26573	1087	12876	4858186	5220083	19200
3	668-	22993	1019	10467	3385592	3691008	15400
10	608-	18993	938	7880	2120634	2425912	12000
30	545-	15290	859	5730	1262313	1423269	9000
100	470-	11258	761	3764	625819	693442	6400
300	393-	7744	660	2335	275208	298415	4200
1000	292-	4338	528	1236	60093	60862	2400
3000	172-	2084	367	616	19713	21838	1000
10000							
30000							
MAXIMUM DOSE							
8422							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	709-	28341	1476	22569	7659799	8878967	15400
3	651-	20715	1380	17435	5167069	5851688	12000
10	589-	16684	1266	12772	3054806	3465184	9000
30	526-	12992	1152	9044	1687376	1920482	6400
100	449-	9035	1013	5529	699770	823682	4200
300	368-	5779	867	3111	276845	305376	2400
1000	260-	2927	612	1433	74985	71721	1000
3000	128-	1214	421	501	11490	10560	1000
10000							
30000							
MAXIMUM DOSE							
6092							

Table II-30  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

1 YIELD (MEGATONS) 20 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	688-	53076	836	6592	5023434	5567392	33000
3	636-	45901	781	5299	3520047	3873581	28000
10	574-	37679	716	4020	2224865	2428247	23400
30	511-	30451	651	2967	1339010	1443070	19200
100	438-	22337	571	1942	694516	694516	15400
300	354-	15213	487	1233	294235	301564	9000
1000	247-	8375	303	661	91556	89508	4200
3000	113-	3679	224	350	20637	20844	1000
10000							
30000							
MAXIMUM DOSE							
7469							

EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	686-	48707	870	11296	7736032	8764276	33000
3	634-	41464	813	8869	5201971	5864880	28000
10	571-	33407	745	6425	3046912	3429013	23400
30	509-	26030	676	4512	1710769	1881012	15400
100	432-	18157	593	2811	754022	820661	12000
300	351-	11594	504	1621	286667	304178	6400
1000	242-	5896	385	763	74587	73561	2400
3000	107-	2436	226	378	12912	13116	1000
10000							
30000							
MAXIMUM DOSE							
6071							

EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	680-	44201	994	19300	11654339	13606305	28000
3	627-	36886	927	14758	7667945	8796045	23400
10	564-	28806	848	10341	4195781	4790537	19200
30	500-	21530	768	6805	2134969	2354864	15400
100	422-	14039	670	3980	815940	904090	12000
300	339-	8253	566	2092	263548	282414	4200
1000	228-	3795	424	941	55869	59471	2400
3000	84-	1466	226	364	8454	8860	1000
10000							
30000							
MAXIMUM DOSE							
4842							

Table II-31  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

1 YIELD (MEGATONS) 40 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	656-	97209	765	5774	8034593	8876739	64000
3	601-	82675	711	4529	5449408	5924270	57000
10	536-	64487	646	3325	3252591	3500945	44200
30	470-	51634	580	2355	1817500	1927558	33000
100	388-	35731	496	1466	815600	831548	23400
300	300-	22404	410	866	315137	308945	12000
1000	176-	10674	282	441	79781	75101	4500
3000	20	3469	218	218	11143	11939	1000
MAXIMUM DOSE							
4952							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	655-	88384	774	9696	12039512	13560758	57000
3	601-	77099	719	7405	7757254	8649577	50400
10	536-	57922	653	5193	4264195	4741708	38400
30	470-	43015	586	3480	2181518	2376877	28000
100	388-	27969	503	1988	840179	885589	19200
300	299-	16378	414	1083	276574	283602	9000
1000	174-	7360	284	495	60603	58793	4200
3000	50	2412	216	216	6615	8363	1000
MAXIMUM DOSE							
4556							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	653-	79275	808	16309	17942372	20475478	50400
3	598-	64567	750	12043	10933448	12347766	44200
10	533-	44371	680	8038	5568807	6190386	33000
30	467-	30639	611	5056	2512015	2766985	23400
100	387-	20639	523	2696	821449	890397	12000
300	295-	11090	429	1354	228546	242112	6400
1000	169-	4605	291	568	41095	42580	2400
3000	275	1414	179	179	3033	4761	1000
MAXIMUM DOSE							
3585							

Table II-32  
Supplement to  
WSEG RM No. 10

8-24-59-2

# Calculated Fallout Contours (Maximum Biological Dose)

1 YIELD (MEGATONS) 60 WIND (KNOTS)

ALL DISTANCES AND AREAS ARE SHOWN IN STATUTE MILES TO 2 DECIMAL PLACES. DECIMAL (NOT SHOWN) SHOULD BE READ BEFORE LAST 2 DIGITS.

EFFECTIVE FALLOUT SHEAR 0.2 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	636-	137648	735	5294	10526246	11516718	57400
3	581-	115919	679	4102	6927940	7507123	57200
10	513-	91552	613	2945	3994812	4256637	44200
30	445-	69362	546	2031	2133155	2226547	33000
100	359-	46000	462	1223	883537	890962	28000
300	271	27149	368	696	312246	299656	15400
1000	164-	11554	223	348	67754	63915	4200
3000	663	2370	124	124	2888	5969	1000
MAXIMUM DOSE							
3607							
EFFECTIVE FALLOUT SHEAR 0.4 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	636-	124559	738	8804	15430203	17313481	74000
3	580-	102528	683	6602	9674221	10692689	64000
10	513-	78309	617	4517	5100960	5592416	50400
30	445-	56743	549	2915	2436039	2618692	38400
100	359-	35196	464	1609	863531	898673	23400
300	263-	19382	369	840	255480	259265	12000
1000	164-	8030	223	374	50514	47876	4200
3000	741	1729	114	114	1565	4409	1000
MAXIMUM DOSE							
3453							
EFFECTIVE FALLOUT SHEAR 0.8 KNOTS/1000 FT. ALTITUDE							
1 DOSE (ROENTGENS)	2 MAXIMUM UPWIND POSITION	3 MAXIMUM DOWNWIND DISTANCE	4 CROSSWIND HALFWIDTH AT ORIGIN	5 MAXIMUM CROSSWIND HALFWIDTH	6 ACTUAL AREA	7 ESTIMATED AREA (ELLIPSE)	8 RANGE TO MAXIMUM WIDTH
1	635-	110829	753	14680	22890910	25702935	71400
3	579-	88747	697	10627	13306899	14911195	57000
10	512-	64832	629	6839	6326528	7020106	44200
30	443-	44255	559	4166	2626284	2925323	28000
100	357-	25180	472	2118	791594	816591	15400
300	261-	12813	375	1003	201018	205991	6400
1000	120-	4992	225	411	33303	33013	2400
3000							
MAXIMUM DOSE							
2991							

Table II-33  
Supplement to  
WSEG RM No. 10